

Title (en)

REGULATOR CIRCUIT AND CAR PROVIDED WITH THE SAME

Title (de)

REGLERSCHALTUNG UND DAMIT AUSGESTATTETES AUTO

Title (fr)

CIRCUIT REGULATEUR ET AUTOMOBILE EQUIPEE D'UN TEL CIRCUIT

Publication

**EP 1959328 A1 20080820 (EN)**

Application

**EP 06834090 A 20061206**

Priority

- JP 2006324335 W 20061206
- JP 2005355150 A 20051208

Abstract (en)

An output transistor (12) is provided between an input terminal (102) and an output terminal (104). An error amplifier (10) adjusts the gate voltage ( $V_g$ ) of the output transistor (12) such that the voltage that corresponds to the output voltage  $V_{out}$  approaches a predetermined reference voltage ( $V_{ref}$ ). A fluctuation detection capacitor (C1) is provided on a path from the input terminal (102) to a grounded terminal (GND), which sets one terminal thereof to a fixed voltage. A current feedback circuit (20) supplies, to the gate of the output transistor (12), the current ( $I_{x2}$ ) that corresponds to the current ( $I_{x1}$ ) that flows through the fluctuation detection capacitor (C1). A clamp circuit (30) clamps the gate voltage ( $V_g$ ) of the output transistor (12). The clamp circuit (30) clamps the gate voltage ( $V_g$ ) of the output transistor (12) such that the voltage difference between the gate of the output transistor and the input terminal (102) exhibits a predetermined clamp voltage ( $V_{clmp}$ ) or more.

IPC 8 full level

**G05F 1/56** (2006.01); **B60R 16/03** (2006.01)

CPC (source: EP US)

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